

REMARKS

Claims 50-67, 69-72, and 74-83 were pending in this application at the time the present Office Action was mailed, with claims 56, 75, and 78-83 withdrawn pursuant to a restriction requirement. Claims 51-56 have been amended. More specifically, claims 52 and 53 have been rewritten in independent form to include all the features of the corresponding base claim and any intervening claims. Claims 51 and 54-56 have been amended solely to change the dependencies of these claims. Claim 50 has been cancelled without prejudice to pursuing this claim in a continuation, divisional, reissue, or other application. New claims 84 and 85 have been added. Accordingly, claims 51-67, 69-72, and 74-85 remain pending, with claims 56, 75, and 78-83 withdrawn.

The status of the application in light of the Office Action mailed March 13, 2006, is as follows:

(A) Claims 50, 51, 54, 55, 57-60, 62, 64, 65, and 67 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,222,014 to Lin ("Lin"); and

(B) Claims 69-72, 74, 76, and 77 have been allowed, and claims 52, 53, 61, and 66 were indicated to be allowable if rewritten in independent form to include all of the features of the claims from which they depend.

The undersigned attorney wishes to thank the Examiner for engaging in a telephone conference on June 8, 2006 to discuss the present Office Action, the Lin reference, and the pending claims. During the course of the telephone conference, the undersigned attorney and the Examiner discussed some of the distinctions between the pending claims and the teachings of Lin. The following remarks summarize and expand upon the various points raised during the June 8th telephone conference.

A. Response to Section 102 Rejection of Claims 50, 51, 54, 55, 57-60, 62, 64, 65, and 67

Claims 50, 51, 54, 55, 57-60, 62, 64, 65, and 67 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lin. Claim 50 has been cancelled and, accordingly, the rejection of this claim is now moot. Claims 51, 54, and 55 have been amended to depend from base claim 53.

As discussed below, claim 53 has been rewritten in independent form and is in condition for allowance. Accordingly, claims 51, 54, and 55 are allowable as depending from allowable claim 53, and also because of the additional features of these dependent claims. Therefore, the Section 102 rejection of claims 51, 54, and 55 should be withdrawn.

The undersigned attorney thanks the Examiner for providing a detailed explanation of his position regarding the Lin reference during the June 8th telephone conference. As set forth in detail below, Lin cannot support a Section 102 rejection of claims 57-60, 62, 64, 65, and 67 for at least the reason that this reference fails to disclose or suggest all the claimed features.

1. Independent Claim 57 Includes, *Inter Alia*, a Support Member, a First Packaged Microelectronic Device Having a First Planform Shape Connected to the Support Member, and a Second Microelectronic Device Having a Second Planform Shape Different Than the First Planform Shape Connected to the Support Member

Independent claim 57 is directed to an assembly of packaged microelectronic devices. The assembly includes a support member, a first packaged microelectronic device, and a second packaged microelectronic device. The first packaged microelectronic device is connected to the support member and includes a first microelectronic die generally encased in a first encapsulant to define a first planform shape. The second packaged microelectronic device is connected to the support member such that the first packaged microelectronic device is positioned between the support member and the second microelectronic device. The second packaged microelectronic device includes a second microelectronic die generally encased in a second encapsulant to define a second planform shape different than the first planform shape.

2. Lin Discloses a Multi-Chip Module System with a Lower and Upper Chip Substrate

Referring to Figure 6 of Lin, this reference discloses a stackable three-dimensional multi-chip module having a semiconductor device 50 on a chip carrier substrate 52. Another semiconductor device 44 is positioned on another chip carrier 46. The two chip carriers are connected with solder joints 29 such that the chip carrier 46 is positioned between the two semiconductor devices 44, 50. It appears from Lin's drawings and descriptions that the semiconductor devices 44 and 50 have identical planform shapes.

3. Claim 57 is Patentable over Lin Because this Reference Fails to Disclose or Suggest, *inter alia*, Multiple Packaged Microelectronic Devices with Varying Planform Shapes

Claim 57 is patentable over Lin because this reference fails to disclose or suggest all the claimed features. For example, Lin fails to disclose a "first packaged microelectronic device having a first planform shape" coupled to the same support member as a "second packaged microelectronic device having a second planform shape . . . the second planform shape being different than the first planform shape." As discussed during the June 8th telephone conference, "planform shape" is defined as the device's "footprint." (See, e.g., Specification, [0017].) This definition is further supported by *Webster's Unabridged Dictionary* (2d ed., Random House 1998), which defines "planform" as "the outline of an object as viewed from above." As discussed in detail during the above-referenced telephone conference, Lin's Figure 6 discloses two semiconductor devices 44 and 50 having identical planform shapes. Put another way, when viewed from above, the two semiconductor devices 44 and 50 of Lin appear to have identical footprints. Figures 1 and 5 of Lin also disclose similar features. Thus, Lin fails to disclose a first and a second packaged microelectronic device having different planform shapes as required by claim 57. Accordingly, the Section 102 rejection of claim 57 over Lin should be withdrawn.

Claims 58-60 and 62 depend from base claim 57. As discussed above, claim 57 is allowable. Therefore, claims 58-60 and 62 are allowable as depending from claim 57, and also because of the additional features of these dependent claims. Accordingly, the Section 102 rejection of claims 58-60 and 62 should be withdrawn.

Independent claim 65 includes several features generally similar to those described above with reference to claim 57. However, instead of reciting packaged devices having different planform shapes (as in claim 57), claim 65 includes a second packaged microelectronic device having edges "extending outward beyond" the edges of a corresponding first packaged microelectronic device. As discussed during the June 8th telephone conference, Lin fails to disclose or suggest a first and a second microelectronic device having different lateral extents. Rather, the semiconductor devices 44 and 50 illustrated in Figure 6 of Lin appear to have identical lateral extents. Thus, because Lin fails to disclose or suggest all the features of claim 65, the Section 102 rejection of this claim should be withdrawn.

Claims 64 and 67 depend from base claim 65. As discussed above, claim 65 is allowable. Therefore, claims 64 and 67 are allowable as depending from claim 65, and also because of the additional features of these dependent claims. Accordingly, the Section 102 rejection of claims 64 and 67 should be withdrawn.

B. Allowable Claims

The applicant thanks the Examiner for allowing claims 69-72, 74, 76, and 77, and indicating that claims 52, 53, 61, and 66 would be allowable if rewritten in independent form to include all of the features of their respective base claims and any intervening claims. Although the undersigned attorney agrees with the Examiner's conclusion that claims 69-72, 74, 76, and 77 are allowable, the undersigned attorney notes that these claims may be allowable for reasons other than those identified by the Examiner and does not concede that the Examiner's characterization of the terms of these claims and the prior art are correct.

Claims 52 and 53 have been rewritten in the stated form, and claim 61 has been rewritten in the stated form as new claim 84. Accordingly, claims 52, 53, and 84 are in condition for allowance. Claim 66, which depends from base claim 65, has not been rewritten in independent form because claim 65 should now be in condition for allowance for the reasons discussed above. Accordingly, the objection to claim 66 should be withdrawn.

C. New Claim 85

New claim 85 has been added by this amendment. Applicant respectfully submits that claim 85 is fully supported by the originally filed specification. New claim 85 is patentable over the applied reference for the reasons discussed above with respect to claim 57, and also for the additional features of this claim.

Conclusion

In view of the foregoing, the pending claims comply with 35 U.S.C. § 112 and are patentable over the applied art. The applicant respectfully requests reconsideration of the application and a mailing of a Notice of Allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-3982.

Respectfully submitted,

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